

General Info: Ecosystem Priorities and Relative Environmental Value Criteria	
Ecosystem Priorities	
P 1	Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
P 2	Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.
P 3	Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat
P 4	Improve ecosystem water quality
P 5	Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage
P 6	Increase attraction flows during upstream migration to reduce straying of anadromous species into non-natal tributaries
P 7	Increase Delta outflow to provide low salinity habitat for Delta smelt, longfin smelt, and other estuarine fishes in the Delta, Suisun Bay, and Suisun Marsh
P 8	Maintain or restore groundwater and surface water interconnection to support instream benefits and groundwater dependent ecosystems.
P 9	Enhance flow regimes or groundwater conditions to improve the quantity and quality of riparian and floodplain habitats for aquatic and terrestrial species.
P 10	Enhance the frequency, magnitude, and duration of floodplain inundation to enhance primary and secondary productivity and the growth and survival of fish
P 11	Enhance the temporal and spatial distribution and diversity of habitats to support all life stages of fish and wildlife species
P 12	Enhance access to fish spawning, rearing, and holding habitat by eliminating barriers to migration
P 13	Remediate unscreened or poorly screened diversions to reduce entrainment of fish
P 14	Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands
P 15	Develop and implement invasive species management plans utilizing techniques that are supported by best available science to enhance habitat and increase the survival of native species
P 16	Enhance habitat for native species that have commercial, recreational, scientific, or educational uses
Relative Environmental Value Criteria (REVs)	
REV 1	Number of different ecosystem priorities, for which corresponding public benefits are, provided by the project.
REV 2	Magnitude of ecosystem improvements.
REV 3	Spatial and temporal scale of ecosystem improvements.
REV 4	Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers for managing ecosystem benefits.
REV 5	Immediacy of ecosystem improvement actions and realization of benefits
REV 6	Duration of ecosystem improvements.
REV 7	Consistency with species recovery plans and strategies, initiatives, and conservation plans
REV 8	Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
REV 9	Efficient use of water to achieve multiple ecosystem benefits
REV 10	Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Project Information	
Project Name	
Centennial Reservoir Project	
Project Description (Summary)	
<p>The Proposed Project involves construction of a new water supply reservoir of 110,000-acre-foot, reconstruction of Dog Bar Road and Bridge, a new 6.2-mile-long raw water pipeline with hydrants, low-impact recreation facilities, and appurtenant facilities and features. NID is proposing the Centennial Reservoir to be constructed between the existing Rollins Reservoir and Combie Reservoir. Both reservoirs are located just within the eastern boundary of NID's service area within both southern Nevada County and western Placer County. The additional water supply generated from the proposed project would help reduce projected water supply shortages during prolonged droughts under 2030 and 2070 conditions, including consideration of climate change. The proposed project would also provide ecosystem and recreation benefits. Please refer to the Eligibility</p>	

Ecosystem Priorities Application Worksheet (August 2016)

and General Project Information Tab, A.3 Project Description for a full description.
Identify the current conditions date (i.e., year) that will be used within the application.
2015
Ecosystem improvement application instructions:
To complete the ecosystem improvement section of the Water Storage Investment Program application review the 16 ecosystem priorities listed above, determine which priorities will be addressed by your project's ecosystem improvements, and answer all questions for each priority you will address. In addition to answering the priority-specific questions, answer the general questions listed on this worksheet which apply to all priorities addressed by your project. The final relative environmental value of each project will be based on a technical review of each ecosystem priority using relative environmental criteria (REV) 2-10 and the total number of priorities claimed by a project (REV 1).
For the purpose of this application the Current Conditions date will be based on the existing conditions of an applicant's CEQA document. If specific data requested in this application is not available in the CEQA document, the applicant will use the demarcation date of the existing conditions in the CEQA document. An applicant must use the demarcation date of the existing conditions from their CEQA document consistently within the application when identifying current conditions.
REV 1: Number of ecosystem priorities targeted by the project
Briefly explain which ecosystem priorities will be met by this project.
The project meets ecosystem priorities 4, 14, 15, and 16. Please refer to the Ecosystem Priorities Forms for more information.
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Describe the process through which an adaptive management and monitoring program will be developed for approval by the responsible agency.
The Federal and State permitting processes preceding CEQA and NEPA certification and final project approval will be extensive. NID shall coordinate with USACE, USFWS, and California DFW to prepare adaptive management and monitoring programs to address wetlands and waters of the U.S., federally and state-listed plant and animal species potentially affected by the proposed project as well as native fisheries management. Given that the project is in the early stages of planning and environmental review, such programs have yet to be developed.
Please refer to the Ecosystem Priorities Forms for more information.
Describe the framework you will use to develop measurable objectives, performance measures, thresholds, and triggers for your adaptive management and monitoring program.
As stated in the box above, the project is in the early stages of planning and environmental review. As such framework for the adaptive management and monitoring programs to address wetlands and waters of the U.S., federally and state-listed plant and animal species potentially affected by the proposed project as well as native fisheries management has not been established by NID and the resource agencies The Federal and State permitting processes preceding CEQA and NEPA certification and final project approval will be extensive.
Please refer to the Ecosystem Priorities Forms for more information.
How will operational decisions be made if physical parameters and biological responses fall outside the range of anticipated benefits?
Although reservoir conditions may vary slightly year to year as a result of seasonal hydrological conditions, the hydrologic conditions in the area that will support ecosystem improvements as a result of water quality, enhanced wetlands, riparian habitat, and native fish habitat, and invasive species management are expected to remain relatively stable. With operation of the reservoir, the benefits of the project for these aforementioned purposes will be ongoing and are inherent to project implementation.
Please refer to the Ecosystem Priorities Forms for more information.
What funding sources and financial commitments do you intend to utilize for the formation and implementation of an adaptive management and monitoring program over the duration of the claimed benefits?

Ecosystem Priorities Application Worksheet (August 2016)

<p>As stated in the boxes above, the project is in the early stages of planning and environmental review. As such, framework for the Project adaptive management and monitoring programs is yet to be developed with the resource agencies, therefore, no funding sources or financial commitments have been reviewed yet. Once the requirements for the Project adaptive management and monitoring programs are developed funding source options will be evaluated.</p>
<p>Explain what environmental uncertainties are relevant to your claimed benefit(s) and will be included in your adaptive management and monitoring program (i.e. climate change, sea level rise, earthquakes, variation in snow pack, forest fires, landslides/erosion etc.).</p>
<p>NID's proposal for the creation of a new surface storage facility is key to dealing with the effects of drought and climate change on water supplies for both human and ecosystem needs. Please refer to the Eligibility and General Project Information Tab, A.3 Project Description and the Ecosystem Priorities Forms for more information related to the environmental and climatic uncertainties considered in development of the Proposed Project.</p>
<p>REV 9: Efficient use of water to achieve multiple ecosystem benefits</p>
<p>Will the same unit of water benefit multiple priorities? If so, explain which priorities will benefit, and the anticipated differences in project water availability between priorities.</p>
<p>Yes. As stated above, although reservoir conditions may vary slightly year to year as a result of seasonal hydrological conditions, the hydrologic conditions in the area that would support ecosystem improvements as a result of water quality, enhanced wetlands, riparian habitat, and native fish habitat, and invasive species management are expected to remain relatively stable. With operation of the reservoir, the benefits of the project for these aforementioned purposes would likely be available at the various operational levels and continuously since these improvements are inherent to project implementation. At maximum pool, the proposed reservoir will provide 1,300 acres of open water habitat, which would equally support the ecosystem improvements as a result of water quality, enhanced wetlands, riparian habitat, and native fish habitat, and invasive species management.</p> <p>Please refer to the Ecosystem Priorities Forms for more information.</p>
<p>How will hydrologic connections among priorities be measured and guaranteed?</p>
<p>As stated in the boxes above, the project is in the early stages of planning and environmental review. As such, performance measures, thresholds, and requirements for the Project adaptive management and monitoring programs are yet to be developed with the resource agencies. Once the requirements for the Project adaptive management and monitoring programs are developed hydrologic connection guarantees among the ecosystem priorities will be evaluated.</p>